

C1 0361 SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

FILL IN THIS FORM COMPLETELY PLEASE TYPE

COUNTY NUMBER 13 A515042

ST/CO USE ONLY DATE Received MM DD YY

DATE WELL COMPLETED MM DD YY 6 13 06

Depth of Well 22 150 26 (TO NEAREST FOOT) 9/13/06 O.K. (AB)

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-95-0346

OWNER Toll Brothers last name first name STREET OR RFD Fox Chase Court TOWN Ellicott City SUBDIVISION Benedict Farm SECTION LOT 13

WELL LOG Not required for driven wells STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

GROUTING RECORD WELL HAS BEEN GROUTED (Circle Appropriate Box) TYPE OF GROUTING MATERIAL (Circle one) CEMENT CM BENTONITE CLAY BC NO. OF BAGS 46 NO. OF POUNDS 4324 GALLONS OF WATER 276 DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. to 66 ft.

CASING RECORD casing types insert appropriate code below MAIN CASING TYPE ST Nominal diameter top (main) casing (nearest inch)! 06 Total depth of main casing (nearest foot) 70

OTHER CASING (if used) diameter inch depth (feet) from to

SCREEN RECORD screen type or open hole insert appropriate code below ST BR HO PL OT

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED YES Y NO N

- CIRCLE APPROPRIATE LETTER A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED E ELECTRIC LOG OBTAINED P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO. 1 M SD009 DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. 1 D

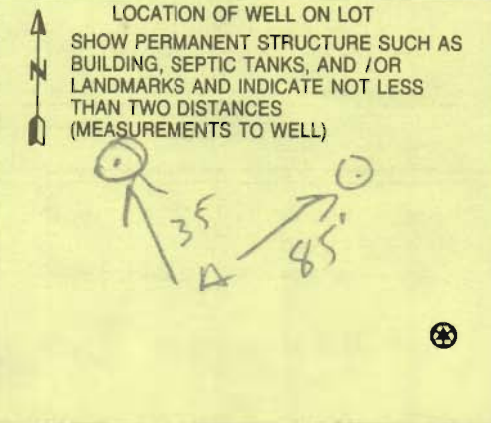
SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

C 2 DEPTH (nearest ft.) 1 2 HO 70 150 3 23 24 26 30 32 36 4 38 39 41 45 47 51

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) T (E.R.O.S.) W Q 70 72 74 75 76 TELESCOPE CASING LOG INDICATOR OTHER DATA

C 3 PUMPING TEST HOURS PUMPED (nearest hour) 03 PUMPING RATE (gal. per min.) 15 METHOD USED TO MEASURE PUMPING RATE 1961 WATER LEVEL (distance from land surface) BEFORE PUMPING 18 ft. WHEN PUMPING 30 ft. TYPE OF PUMP USED (for test) A air P piston T turbine C centrifugal R rotary O other J jet S submersible

PUMP INSTALLED DRILLER INSTALLED PUMP YES NO IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS. TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29 CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 35 PUMP HORSE POWER 37 41 PUMP COLUMN LENGTH (nearest ft.) 43 47 CASING HEIGHT (circle appropriate box and enter casing height) LAND SURFACE below 02 (nearest foot)



524370 please print or type

HO-95-0346 fill in this form completely

Date Received (APA)

3/24/2006

OWNER INFORMATION

Toll Brothers

14324 Philadelphia Rd

Glennelg md 21737

LOCATION OF WELL

Howard

Benedict Farm

Columbia

Columbia

3 MILES FROM TOWN

DRILLER INFORMATION

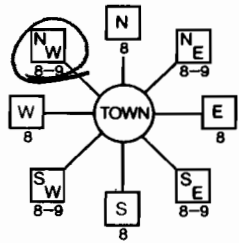
Allen Compton M S D 009

Fogles Well Drilling

580 Obrecht Rd

3-24-06

DIRECTION OF WELL FROM TOWN



Fox Chase Court

ON WHICH SIDE OF ROAD

45 DISTANCE FROM ROAD

ENTER FT OR MI

TAX MAP: 29 BLK: 9 PARCEL: 28

WELL INFORMATION

APPROX. PUMPING RATE 5

AVERAGE DAILY QUANTITY NEEDED 500

USE FOR WATER

- DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION (circled)
FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
INDUSTRIAL, COMMERCIAL, DEWATERING
PUBLIC WATER SUPPLY WELL
TEST, OBSERVATION, MONITORING
GEO-THERMAL

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard (13) A515042

STATE SIGNATURE

DATE ISSUED 4/5/2006 Brian Baber 4/5/2007

NORTH GRID 510 000 EAST GRID 825 000

APPROXIMATE DEPTH OF WELL 300 FEET

APPROXIMATE DIAMETER OF WELL 6 INCH

METHOD OF DRILLING

- BORED (or Augered) AIR-ROTary (circled)
JETTED AIR-PERCussion
Jetted & DRIVEN ROTARY (Hydraulic Rotary)
CABLE REVerse-ROTary
DRive-POINT
other

REPLACEMENT OR DEEPEMED WELLS

- THIS WELL WILL NOT REPLACE AN EXISTING WELL (circled)
THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
THIS WELL WILL DEEPEM AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED

Not to be filled in by driller

APPROP. PERMIT NUMBER HO 201030006

PERMIT No HO-95-0346

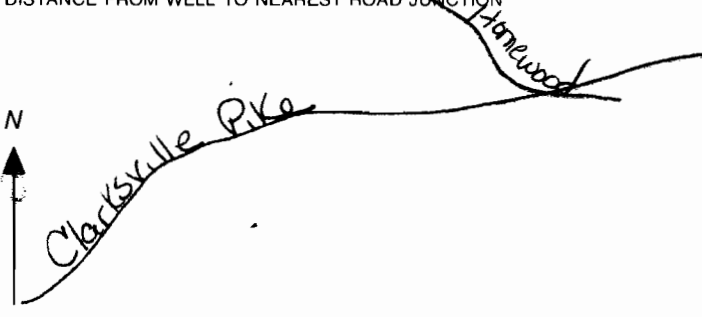
SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

SOURCES OF DRILLING WATER

WRITE THE BOX NUMBER FROM THE MAP HERE

E 8265 N 510

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS



SPECIAL CONDITIONS Water Sample Must Be Taken During Yield Test



HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WATER AND SEWERAGE PROGRAM
TEL: (410)313-2640 FAX: (410)313-2648

Information Form for the Installation of the Well Pump, Pitless Adapter, and Supply Piping

NOTE: The installer is responsible for requesting an inspection prior to 9 am on the day of the desired inspection. No work is to be covered until approved by the Health Department. All installations must comply with the National Standard Plumbing Code (NSPC, as amended locally) and COMAR 26.04.04 (MD Well Construction Regulations). Submission of a complete form is required prior to Use and Occupancy approval.

Company Name: Fogle's Well Drilling Telephone #: 410-795-5670
Address: 6003 Woodbine Rd Woodbine, Md 21797

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer

Name (Print): Allen Compton License# MSD009

\*A licensed individual must perform the actual installation. Apprentices must be under the direct supervision of a licensed journeyman or master plumber, pump installer or well driller. Licenses may be subjected to field verification.

Name of Property Owner: Toll Brothers Telephone #:
Subdivision: Benedict Farm/Potomac Lot #: 13 Well Tag #: HO-95-0946
Site Address: 1161 Fox Chase Ct

Submersible Pump Data Pitless Adapter Well Cap and Electric Conduit
Make: Caelcofos Make: Campbell Two piece watertight cap: YES
Model #: 1520A02-150 Model#: N/A Screened, vented well cap: YES
Pump Capacity 15 GPM Depth: 36 (36" min) Cap secured to casing: YES
Well Yield: 15GPM NSF approved: YES Conduit min 18" B.G.: YES
Depth of well encountered at time of pump installation: 150 (feet) Conduit secured to well cap: YES
If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4.
Torque arrestors or Cable guards are required - Must circle one
Safety rope, if used, attached to inside of well casing with eye bolt N/A

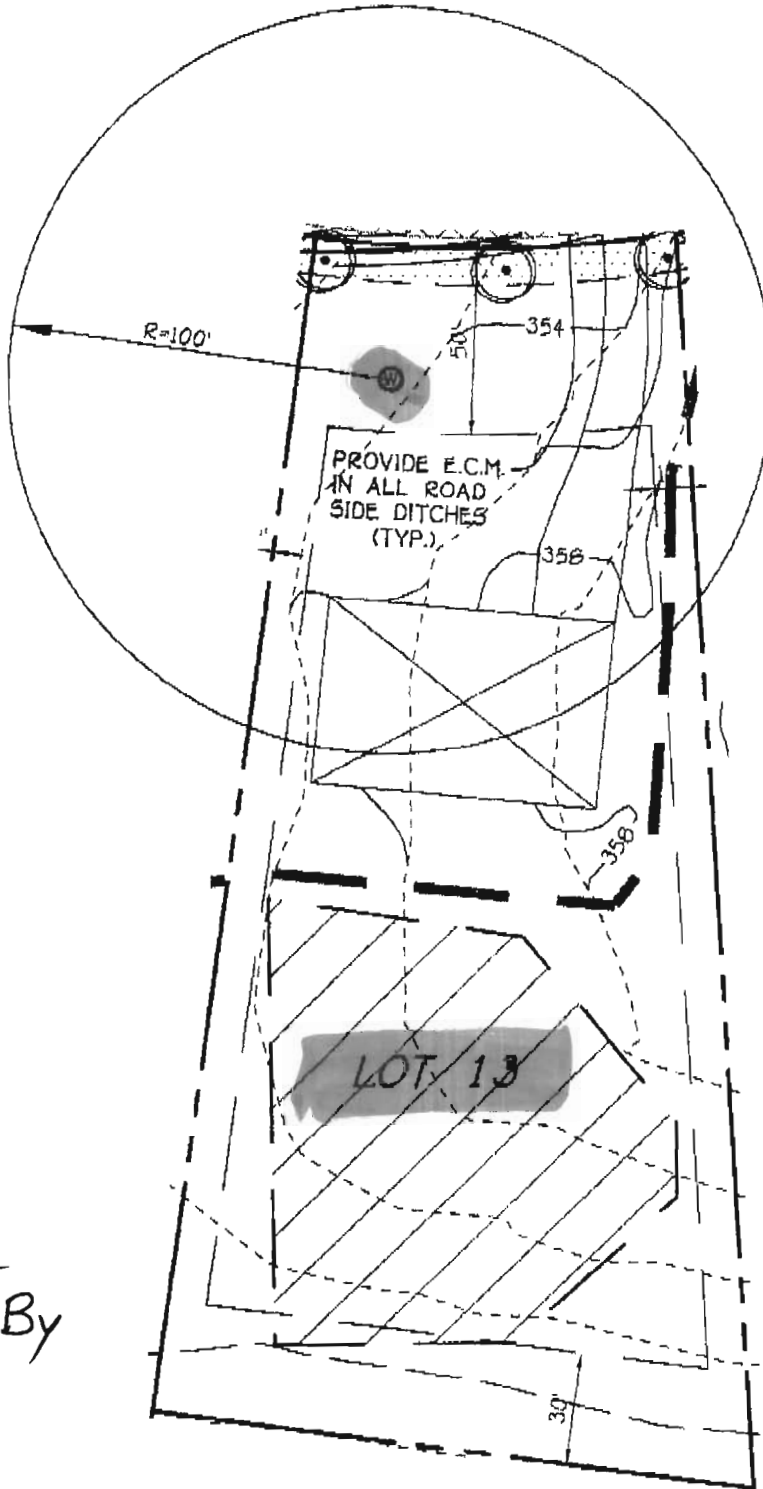
Piping to house House Connection
Type: 1" BACK RACK PVC sleeved to undisturbed soil at wall penetration: YES
PSI: 160 (160 psi min) Approximate length of sleeve: 5
Depth of supply line: 42 (36" min) Sleeve caulked and sealed properly: YES

The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve area. If this cannot be accomplished, contact this office for approval prior to installation.

Signature of company representative responsible for installation: Allen Compton date: 1-16-08

For Health Department Use Only - Not to be completed by Installer

Date Insp. Requested: Date Insp. Approved: 5/20/08 AB
Inspection Data: Pitless adapter and water supply line at least 36" below grade
Two piece cap installed and attached to casing securely
Elec. conduit extends at least 18" below grade/attached to cap properly
Safety rope installed inside of well casing
Correct well tag attached properly and casing 8" above finished grade
Water supply line sleeved adequately at house connection
Adequate grout observed below pitless adapter



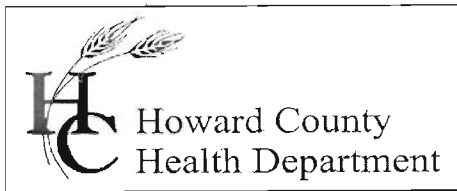
3/16/06  
 Well Site  
 Staked By  
 F, C + C.  
 (BB)

1" = 50'

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
 ELICOTT CITY, MARYLAND 21042  
 (410) 461 - 2855

WELL LOCATION PLAN  
 LOT-13  
 ZONED RC-DEO  
 TAX MAP No. 29 GRID No. 9 PARCEL No. 28  
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SCALE 1" = 50' DATE: FEBRUARY 16, 2006

K:\SDSK\PROJ\30754 Benedict Farm\dwg\PHASE 1 - FINAL\30754 WELL LOCATION.dwg, 2/17/2006 11:35:42 AM, 1:1



Bureau of Environmental Health  
7178 Gateway Drive Columbia, MD 21046  
(410) 313-2640 Fax (410) 313-2648  
TDD (410) 313-2323 Toll Free 1-866-313-6300  
website: www.hchealth.org

Peter L. Beilenson, M.D., M.P.H., Health Officer

April 11, 2008

Toll MD II LP  
7164 Columbia Gateway Drive, #230  
Columbia, MD 21046

RE: Homewood Crossing, Lot 13  
Benedict Farm  
11611 Fox Chase Court  
Ellicott City, MD 21042  
BP #: B07002019  
Well Permit # HO-95-0346

Dear Sir:

This is to advise you that the septic system for the above referenced property has been installed and inspected. **Final approval of the septic system was granted on 11/14/2007.** **Final approval of the well line connection to the dwelling was approved on 03/20/2008.**

The water sample results indicate that the water samples submitted for testing were free of coliform and fecal coliform bacteria at the time of sampling and are bacteriologically safe for drinking. The water sample results were found to be in compliance with COMAR water quality standards.

Gross Alpha and Beta samples were also collected on 06/16/2006. The Gross Alpha result was below its maximum contaminant level (MCL) of 15 pCi/L, while the Gross Beta level was below its targeted value of 50 pCi/L. At the time of the testing and with respect to these parameters, the future well water supply appears safe for all uses. No additional testing **for these parameters** will be required to secure the future Use and Occupancy.

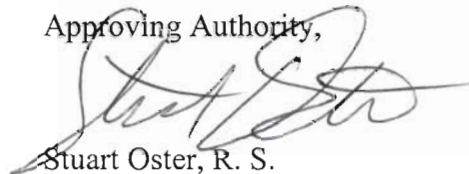
#### INTERIM CERTIFICATE OF POTABILITY

This certifies that the initial sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under well permit #HO-95-0346. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies. Based upon satisfactory investigation and evaluation, the Howard County Health Department as authorized by the Maryland Department of the Environment accepts this well system as required by COMAR 26.04.04.

This certificate may become final upon completion of the second bacteriological test, which is to be taken by the county health department within six months of receipt of this letter. **Please contact (410) 313-1773 to schedule a final water sample appointment. Currently, there is no charge for this final sampling.**

Date of Water Samples: 03/20/2008 & 04/10/2008  
Date of Sample for Gross Alpha & Beta: 06/16/2006  
Date of Well Completion: 06/13/2006

Approving Authority,

A handwritten signature in black ink, appearing to read "Stuart Oster", is written over a light gray rectangular background.

Stuart Oster, R. S.  
Well & Septic Program

cc: Building Inspector's Office  
Community Health Services  
File



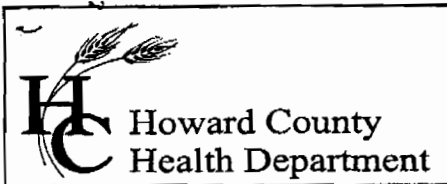
Analytical Summary Report

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Client Name:	Howard County Health Department	Client Sample ID:	HOGCBF136/16
Receipt Date/Time:	6/13/2006	Lab Sample ID:	606087-005-005-1/1
Prepared Date/Time:	6/14/2006	Sample Matrix:	WATER
Analysis Date/Time:	6/16/2006 9:15:00 AM	Analytical Method:	ALPHA/BETA BY METHOD 900.0

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Isotope	Result	Uncertainty $2\sigma$	MDA	Q
Gross Alpha	1.5397 pCi/L	$\pm 0.8503$ pCi/L	0.9150 pCi/L	
Gross Beta	3.7970 pCi/L	$\pm 1.1155$ pCi/L	1.4828 pCi/L	



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TDD (410) 313-2323 Toll Free 1-866-313-6300  
website: [www.hchealth.org](http://www.hchealth.org)

Penny E. Borenstein, M.D., M.P.H., Health Officer

June 26, 2006

**Toll Brothers – Maryland Division**  
7164 Columbia Gateway Drive  
Columbia, Maryland 21046

**RE: Benedict Farm Subdivision, Lot 13**  
**Well Tag: HO-95-0346**

To Whom It May Concern:

A sample was collected during a yield test on June 16, 2006 and submitted to GPL Laboratories to assess the possible presence of **Gross Alpha** and **Gross Beta** in the future well water supply. **Gross Alpha** and **Gross Beta** measure the total alpha and beta particle activity in a water supply. These naturally occurring radioactive nuclides have been demonstrated to be present in a certain type of geologic formation known as the Baltimore Gneiss which exists in your area of development within the County.

Results from this screening revealed a **Gross Alpha** of  $1.5 \pm 0.8$  picocuries/liter (pCi/L); while the **Gross Beta** level was  $3.8 \pm 1.1$  pCi/L. The **Gross Alpha** result was below its maximum contaminant level (MCL) of 15 pCi/L, while the **Gross Beta** level was below its MCL of 50 pCi/L. At the time of testing and with respect to these parameters, the future well water supply appears safe for all uses. No additional testing for these parameters will be required to secure the future Use & Occupancy. However, other standard (potability) testing will still be necessary.

A copy of the test results is enclosed for your information. Please call this office at 410-313-1773 if you have any further questions or concerns.

Sincerely,

  
Bert Nixon, Deputy Director  
Bureau of Environmental Health

cc: Eric Dougherty, MDE Water Mgmt., Groundwater  
Well & Septic property file

**FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC**

1415 Old Taneytown Rd. Westminster, MD (410) 848-1014 (410) 876-4554 FAX (410) 848-0298

**REPORT OF ANALYSIS**

Laboratory ID #:	67147	Account #:	1930
Reference:	Toll Brothers Lot 13	Company:	Fogle's Well Drilling
Location:	11611 Fox Chase Court Ellicott City, MD 21042	Requested By:	Dave Fogle
Date/ Time Collected:	4/10/2008 1000	Source:	Well Water
Date/Time Rec'd:	4/10/2008 1207	Site:	Kitchen Sink Tap
Chlorine ppm:	Free: ND Total: ND	Treatment:	None
Collected By:	V.M. Fadoul 6804VF-FS	pH:	6.4
		Well #:	HO-95-0346

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Turbidity	6.55	NTU	<10	SM18 2130B	4/10/2008 / 1505 / AD/BD

**NOTES**

- 1 NTU = Nephelometric Turbidity Units
- 2 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 3 ND:None Detected
- 4 Sample collected by client, analyzed as received
- 5 pH and Chlorine level tested in lab

Reason for Test : Use &amp; Occupancy retest 66972

Building Permit # : B07002019

Date Reported: 4/11/2008**MD State Certification # 133**

**FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.**

1413 Old Trolleyway Rd. Westminster, MD (410) 848-1014 (410) 876-3554 FAX (410) 848-0298

**REPORT OF ANALYSIS**

Laboratory ID #:	66972	Account #:	1930
Reference:	Toll Brothers Lot 13	Company:	Fogle's Well Drilling
Location:	11611 Fox Chase Court Ellicott City, MD 21042	Requested By:	Dave Fogle
Date/ Time Collected:	3/20/2008 0900	Source:	Well Water
Date/Time Rec'd:	3/20/2008 1530	Site:	Kitchen Sink Tap
Chlorine ppm:	Free: ND Total: ND	Treatment:	None
Collected By:	V.M. Fadoul 6804VF-FS	pH:	6.5
		Well #:	HO-95-0346

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223 B.	3/21/2008 / 1000 / BCD
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223 B.	3/21/2008 / 1000 / BCD
Nitrate	5.18	mg/L	10	601	3/20/2008 / 1550 / AD/BD
Turbidity	56.1	NTU	<10	SM18 2130B	3/20/2008 / 1545 / AD/BD
Sand	NS	mg/L	5	Visual/Gravimet	3/20/2008 / 1545 / AD/BD

**NOTES**

- 1 mg/L = milligrams per liter (also, parts per million)
- 2 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
- 3 NS = None Seen (NS indicates less than 5 mg/L)
- 4 NTU = Nephelometric Turbidity Units
- 5 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 6 ND:None Detected
- 7 Sample collected by client, analyzed as received
- 8 pH tested on-site

Reason for Test : Use & Occupancy  
 Building Permit # : B07002019

Date Reported: 3/31/2008

MD State Certification # 133